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#### PowerNet

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MmNi<sub>5</sub>-based alloy; Nickel/metal hydride battery; High power application (Yang, H.B. (133) 286)

#### Sulfatio

Gel valve-regulated lead-acid battery; Negative plates; Partial-state-ofcharge (PSoC); Peru; Remote-area power-supply (RAPS) (Newnham, R.H. (133) 141)

# Sulfation

The 42 V PowerNet; Failure mode; High-rate partial-state-of-charge duty; Hydrogen evolution; Lead-acid battery (Lam, L.T. (133) 126) Supercapacitor

Mesoporous carbon; Electrode material; Specific capacitance; ECDL capacitor (Fuertes, A.B. (133) 329)

#### Surface modification

Fluorination; Carbon electrode; Lithium ion battery (Nakajima, T. (133) 243)

# Sustainable development

Battery; Environmental protection; Green lead; Life-cycle assessment; Product stewardship (Roche, M. (133) 3)

#### Synthetic fibre

Absorptive glass mats; Cycle-life; Reinforcement; Valve-regulated lead-acid batteries (Clement, N. (133) 87)

#### System-level modeling

PEM fuel cell; Lumped-parameter model; Transient dynamics; Control volume approach (Xue, X. (133) 188)

#### The 42 V PowerNet

Failure mode; High-rate partial-state-of-charge duty; Hydrogen evolution; Lead-acid battery; Sulfation (Lam, L.T. (133) 126)

#### Thermal fluid

Thermoelectric generation; Thermoelectric device; Heat transfer; Bismuth telluride (Suzuki, R.O. (133) 277)

### Thermal runaway

Battery; Lead-acid; Saturation; Separator dry-out; Valve-regulated (Culpin, B. (133) 79)

#### Thermoelectric device

Thermoelectric generation; Heat transfer; Thermal fluid; Bismuth telluride (Suzuki, R.O. (133) 277)

#### Thermoelectric generation

Thermoelectric device; Heat transfer; Thermal fluid; Bismuth telluride (Suzuki, R.O. (133) 277)

#### Titanium dioxide

Ionic conductivity; Photoelectrochemical solar cell; Solid polymeric electrolyte (Rahman, M.Y.A. (133) 293)

#### Transient dynamics

PEM fuel cell; System-level modeling; Lumped-parameter model; Control volume approach (Xue, X. (133) 188)

### Transition metal oxide

Li ion battery; Anode material; Ni addition; Mechanical milling (Kang, Y.-M. (133) 252)

#### Two-battery concept

Automotive battery separators; Future development; Oxidative stability; Polyethylene separators; Puncture resistance (Böhnstedt, W. (133) 59)

### $V_2O_5$

Lithium battery; Intercalation; Hybrid; Polyaniline; Post-treatment (Kang, S.-G. (133) 263)

#### Valve-regulated lead-acid battery

Absorptive glass mat (AGM) separator; Capillarity; Mechanical strength; Specific surface-area; Springiness; Standard monolayer (Toniazzo, V. (133) 94)

#### Valve-regulated lead-acid batteries

Absorptive glass mats; Cycle-life; Reinforcement; Synthetic fibre (Clement, N. (133) 87)

#### Valve-regulated lead-acid

36/42 V PowerNet systems; PowerNet; State-of-charge; State-of-health; Vehicles (May, G.J. (133) 110)

### Valve-regulated lead-acid

Automobile electrical systems; Battery; High-rate; Life-limiting factors; Partial-state-of-charge (Moseley, P.T. (133) 104)

### Valve-regulated

Battery; Lead-acid; Saturation; Separator dry-out; Thermal runaway (Culpin, B. (133) 79)

#### Valve-regulated

Density/solidity; Lead-acid battery; Micro-glass; porosity; Recombinant battery separator mat (Zguris, G.C. (133) 67)

#### Valve-regulated

Lead-acid battery; Spiral-wound; Dual-tab; HEV (Cooper, A. (133) 116)

#### Vehicles

Valve-regulated lead-acid; 36/42 V PowerNet systems; PowerNet; State-of-charge; State-of-health (May, G.J. (133) 110)